

UMN Window

Evolving Description of ACTS Collaborative Participant's COVID-19 Knowledge Ecosystem Efforts

	Identify Studies	Review Evidence
Current Approach		UMN Evidence Review (earlier version - updates in progress)
Pearls/Tips Learned		
Desired Approach		
Needs to Achieve Desired Approach	Check all that apply <input type="checkbox"/> Better source/input materials [Details:] <input type="checkbox"/> Common format/terminologies for managing/sharing data [Details:] <input type="checkbox"/> Other [Details:]	Check all that apply <input type="checkbox"/> Better source/input materials [Details:] <input type="checkbox"/> Common format/terminologies for managing/sharing data [Details:] <input type="checkbox"/> Other [Details:]
Support We Can Provide Other Participants		

	Produce Guidance	Make Guidance Computable
Current Approach	UMN Anticoagulation Guidance/Protocol (see flowchart under 'expert opinions' - UMN protocol is adapted from this) <ul style="list-style-type: none"> Exploring synergies with ASH, around their COVID-19 anticoagulation living guidelines 	Working with C19HCC Digital Guidelines WG
Pearls/Tips Learned		1.) Generate list of variables needed for input /processing/output/evaluation of CDS 2.) Be comprehensive in generating the list 3.) Reach out to standards companies early as this process can take a few weeks-1 month
Desired Approach		1.) Collaboration with standards companies for mapping
Needs to Achieve Desired Approach	Check all that apply <input type="checkbox"/> Better source/input materials [Details:] <input type="checkbox"/> Common format/terminologies for managing/sharing data [Details:] <input type="checkbox"/> Other [Details:]	Check all that apply <input type="checkbox"/> Better source/input materials [Details:] <input checked="" type="checkbox"/> Common format/terminologies for managing /sharing data <input type="checkbox"/> Other [Details:]
Support We Can Provide Other Participants		1.) Partnership with data standards companies to facilitate rapid mapping of data elements

	Implement Guidance (e.g., as CDS, eQMs)	Analyze Results (e.g., care outcomes)	Apply Results (e.g., Quality Improvement, create evidence)

Current Approach	<ul style="list-style-type: none"> CXR AI Tool: https://www.healthcareitnews.com/news/university-minnesota-epic-build-new-ai-tool-detect-covid-19-x-rays Our current CDS approach leverages either Epic's Cloud computing platform if we are rolling out AI enabled CDS Otherwise our current approach leverages native Epic CDS functions (BPAs, etc.) Evaluation of CDS we currently use Logicstream 	1.) Processing of Epic clarity tables and BPA tables for "pseudo realtime" cleaning and analysis. 1.) Not real time which would be ideal 1.) Doesn't facilitate automated realtime feedback in a timely manner	
Pearls/Tips Learned	1.) Need for CDS to be malleable to facilitate interoperability as various sites (even within same system) may have variation in practices 2.) Need to have expertise in house to implement these solutions	2.) Ensure that research/implementation scientists and quality members are using same definitions for outcomes/process measures etc	
Desired Approach	1.) Interoperable format leveraging CPG-on-FHIR	3.) Need for real time tracking of structural, process, and quality metrics 3.) Should facilitate automated feedback and dashboards for structural measures of care. For example, provider or unit based adherence with XYZ guideline	
Needs to Achieve Desired Approach	Check all that apply __Better source/input materials [Details:] __Common format/terminologies for managing/sharing data [Details:] __x_Other [Details:] - We have a lot of expertise in house using native Epic CDS, but limited expertise implementing CDS hooks/Smart on FHIR/etc. Difficult toolset to find to hire also and hiring freeze due to Covid hurts ability to scale team to include additional toolsets. - Need for certification/trainings so current CDS builders can quickly learn new skills	Check all that apply __Better source/input materials [Details:] __x_Common format/terminologies for managing/sharing data [Details:] __Other [Details:]	Check all that apply __Better source /input materials [Details:] __Common format /terminologies for managing/sharing data [Details:] __Other [Details:]
Support We Can Provide Other Participants			

Stakeholders can place comments at the bottom of any Learning Community page. If you need editing access to these Participant Window pages, please contact support@ahrq-acts.org.

Previous Notes

MN Current Process:

- 100 people looking at evidence on 25 targets - EBM Team
- Librarians running searches on different databased in different intervals. Ad hoc identify important papers that generate press. [Sandy - use DocSearch to identify this new information - searches clinicaltrials.gov, health rss feeds, WHO databases, pubmed, etc.]
- EBM team reviews literature, updates recommendations. Content expert team/system ops team decides what gets implemented. Teams are separate but trying to optimize going forward.
- Going forward, plan to coordinate more closely with EPC. They set up alerts about new info. Manually update SRDR with this new information. SS has team that makes ultimate decision.
 - MN EPC looking at how to abstract information from studies better to update guideline. How to automate processes better (PICO processing).
 - What kind of tools are available to support more standard/excel data capture to speed up structuring of data pulled from reviews. Or does UMN need to create the structured file for input into SRDR. Looking at published trials and also studies underway. (3 ways to get data into SRDR: 1) abstract from studies as they are reviewed, 2) input from other systems (Distiller SR/excel) - most common).
 - interested in ML/NLP support for screening process - look at a wider set of study designs. Prioritize what will be helpful for the topic. (Abstractor builds a model to see if something is relevant to a target (deep learning/neural networks) - presents to user for screening. Being rolled into SRDR.) They are watching COVID-NMA, but not using it in their work at this point. Considering supporting anticoagulation for COVID-NMA work.

MN Enhanced Process:

For Anticoagulation - optimize work/output of people/process/technology:

DocSearch -> L*VE/Epistemonikos Abstractor -> SRDR -> COVID-NMA > AU Living Guidelines C19 Digital Guideline WG - UMN CDS Implementation Team Evaluation [back to beginning]

[How secure are funding sources for these efforts? How resilient are these. Idea is to map out a cross-cutting enhancement approach and how it's being implemented in individual sites. Provide additional information (links, descriptions, regular meetings, perhaps webinars) so everyone can learn more about the individual components and how they are being combined.]